

Last Revision Date: 8/1/2014

**SECTION 1 - CHEMICAL PRODUCT and COMPANY IDENTIFICATION**

Catalog Number: NG-I3120  
Description: Ferric fluoride  
Other Names: FeF3/Iron fluoride

Supplied by CHEM SERVICE, Inc. PO BOX 599, WEST CHESTER, PA 19381 (610)-692-3026  
EMERGENCY PHONE: 1-610-692-3026

**SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS**

CAS: 7783-50-8  
Description: Ferric fluoride  
EINECS No: 232-002-4  
Hazard Symbols: N/A

**SECTION 3 - HAZARDS IDENTIFICATION**

Contact lenses should not be worn in the laboratory.  
All chemicals should be considered hazardous – Avoid direct physical contact!  
Can cause eye irritation.  
Can cause skin irritation.  
May be harmful if absorbed through the skin.  
Can cause an allergic skin reaction.  
Repeated exposure to vapors and/or dust can cause eye injury.  
May be harmful if inhaled.  
Dust and/or vapors can cause irritation to respiratory tract.  
May be harmful if swallowed.  
Can cause nervous system injury.  
Exposure can cause kidney damage.  
Can cause gastro-intestinal disturbances.  
Can be irritating to mucous membranes.  
Chronic exposure may cause erosion of dental enamel.  
Chronic exposure may cause bronchitis.  
Ingestion may cause diarrhea.  
Prolonged exposure may cause nausea/headache/dizziness and/or eye damage.  
Can cause Osteosclerosis: hardening of bones.

**SECTION 4 - FIRST AID MEASURES**

An antidote is a substance intended to counteract the effect of a poison. It should be administered only by a physician or trained emergency personnel. Medical advice can be obtained from a POISON CONTROL CENTER.

In case of contact: Flush eyes continuously with water for 15-20 minutes. Flush skin with water for 15-20 minutes.

If no burns have occurred-use soap and water to cleanse skin.

If inhaled remove patient to fresh air. Administer oxygen if patient is having difficulty breathing.

If patient has stopped breathing administer artificial respiration.

If patient is exhibiting signs of shock - Keep warm and quiet.

Get medical attention if necessary.

If patient is in cardiac arrest administer CPR.

Continue life supporting measures until medical assistance has arrived.

Remove and wash contaminated clothing.

Do not administer liquids or induce vomiting to an unconscious or convulsing person.

If swallowed, rinse out mouth with water, providing the person is conscious.

If swallowed drink 1 to 2 glasses of water.  
Contact Poison Control Center immediately if necessary.  
Get medical attention if necessary.  
If patient is vomiting-watch closely to make sure airway does not become obstructed by vomit.

#### SECTION 5 - FIRE AND EXPLOSION DATA

Flash Point: N/A  
Extinguishing Media: Carbon dioxide, dry chemical powder or spray.  
Upper Explosion Limit: N/A  
Lower Explosion Limit: N/A  
Auto Ignition: N/A  
NFPA Hazard Rating: Health: N/A Flammability: N/A Reactivity: N/A Special: N/A  
(Scale: 0 = Least, 1 = Slight, 2 = Moderate, 3 = High, 4 = Severe)

#### SECTION 6 - ACCIDENTAL RELEASE MEASURES

Spills or leaks: Evacuate area. Wear appropriate OSHA regulated equipment. Ventilate area.  
Absorb on vermiculite or similar material. Sweep up and place in an appropriate container. Hold for disposal.  
Wash contaminated surfaces to remove any residues.  
Remove contaminated clothing and wash before reuse.

#### SECTION 7 - HANDLING AND STORAGE

##### *Handling:*

This chemical should be handled only in a hood. Eye shields should be worn. Use appropriate OSHA/MSHA approved safety equipment. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Wash thoroughly after handling.

##### *Storage:*

Store in a cool dry place. Store only with compatible chemicals. Keep tightly closed.

#### SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA PEL (TWA): 2.5 mg/m<sup>3</sup>  
ACGIH TLV (TWA): 2.5 mg/m<sup>3</sup>  
ACGIH TLV (STEL): N/A

##### *Personal Protective Equipment*

Eyes: Wear safety glasses.  
Skin: Wear appropriate protective gloves to prevent skin exposure.  
Clothing: Wear appropriate protective clothing to minimize contact with skin.  
Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 requirements must be followed whenever workplace conditions warrant a respirator's use.

#### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Color: Lavender  
Phase: Crystalline solid  
Melting Point: 1000°C  
Boiling Point: N/A  
Density: 3.87g/ml  
Evaporation Rate (Butyl acetate-1): N/A  
Vapor Pressure: N/A  
Vapor Density: N/A  
Odor: Odorless  
Solubility in water: Very slightly soluble  
Molecular Weight: FeF<sub>3</sub>  
Molecular Formula: 112.8

**SECTION 10 - STABILITY AND REACTIVITY**

Reacts with water and most reactive hydrogen compounds.  
Corrosive.  
Reacts with phosphorus halides.  
Reacts with carbonates.  
Do not use Magnesium/Aluminum or their alloys as containers.  
Decomposition liberates toxic fumes.  
Hygroscopic.  
Corrodes steel.  
Corrodes copper and its alloys.  
Decomposes under alkaline conditions.  
Decomposes under acidic conditions.  
Incompatible with Iron and Zinc and other light metals.  
Decomposition products are corrosive.  
Incompatible with powdered metals  
Incompatible with active metals (e.g. Sodium).  
Corrosive to metals in the presence of water.  
Corrodes glass.

**SECTION 11 - TOXICOLOGY INFORMATION**

RTECS: NO6865000  
Oral Rat or Mouse LD50: N/A  
Dermal Rat or Mouse LD50: N/A  
Rat or Mouse LC50: N/A

*Carcinogenicity*

OSHA: No      IARC: No      NTP: No      ACGIH: No      NIOSH: No      Other: No

California Proposition 65 info: Not Listed

**SECTION 12 - ECOLOGICAL INFORMATION**

Ecotoxicity: Not Available  
Environmental Fate: Not Available

**SECTION 13 - DISPOSAL CONSIDERATIONS**

Dispose in accordance with Federal, State and Local regulations.

**SECTION 14 - TRANSPORTATION INFORMATION**

UN Number: UN3260  
Class: 8  
Packing Group: II  
Proper Shipping Name: Corrosive solid, acidic, inorganic, n.o.s. (Iron trifluoride)

**SECTION 15 - REGULATORY INFORMATION**

European Labeling in Accordance with EC Directives  
Hazard Symbols: N/A  
Risk Phrases: N/A  
Safety Phrases: N/A

**SECTION 16 - OTHER INFORMATION**

The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is

only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded MSDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

Persons not specifically and properly trained should not handle this chemical or its container. This product is furnished FOR LABORATORY USE ONLY! Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticide products, food additives or as household chemicals.

This Material Safety Data Sheet (MSDS) is intended only for use with Chem Service, Inc. products and should not be relied on for use with materials from any other supplier even if the chemical name(s) on the product are identical! Whenever using an MSDS for a solution or mixture the user should refer to the MSDS for every component of the solution or mixture. Chem Service warrants that this MSDS is based upon the most current information available to Chem Service at the time it was last revised. THIS WARRANTY IS EXCLUSIVE, AND CHEM SERVICE, INC. MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. This MSDS is provided gratis and CHEM SERVICE, INC. SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR CONTINGENT DAMAGES.

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